

selectively binds a KGF polypeptide comprising the amino acid sequence of Figure 7.

93. A polypeptide that is a portion of a keratinocyte growth factor (KGF) protein, wherein said KGF protein has a molecular weight of between about 16 and 30 kDa as determined by SDS/PAGE under reducing conditions wherein said polypeptide is useful in producing antibodies that bind said KGF protein and wherein said polypeptide is not a portion of acidic fibroblast growth factor, basic fibroblast growth factor, epidermal growth factor, transforming growth factor- alpha, granulocyte/macrophage colony stimulating factor or interleukin 3.

94. An isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide has a molecular weight of between about 16 and 30 kDa as determined by SDS/PAGE under reducing conditions, comprises amino acids 32-78 of Figure 7 and has mitogenic activity on BALB/MK keratinocyte cells.

95. The polypeptide of claim 94, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells in a H<sup>3</sup> thymidine incorporation bioassay.

96. An isolated keratinocyte growth factor (KGF) polypeptide comprising (i) an amino acid sequence which has (a) an N-

terminal region which comprises a sufficient number of consecutive amino acids 32-64 of Figure 7 to confer on said polypeptide epithelial cell specificity, said N-terminal region being peptide bonded to (b) a C-terminal core region comprising amino acids 65-157 and 161-189 of Figure 7.

97. The polypeptide of claim 96, which has a conservative amino acid substitution at an amino acid within amino acids 65-157 or amino acids 161-189 of Figure 7.

98. The polypeptide of claim 97, which causes a greater stimulation in BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts than does epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast factor (aFGF) or basic fibroblast growth factor (bFGF) as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.

99. The polypeptide according to claim 97, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

100. The polypeptide according to claim 97, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in

BALB/MK keratinocyte cells, stimulates less than  $1/50^{\text{th}}$  of the maximal thymidine incorporation in NIH/3T3 cell stimulated by aFGF or bFGF.

101. The polypeptide according to claim 97, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than  $1/10^{\text{th}}$  of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

102. The polypeptide according to claim 97, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

103. The polypeptide according to claim 96, wherein said polypeptide further comprises Met at the amino terminus.

104. The polypeptide according to Claim 96, wherein said polypeptide is unglycosylated.

105. The polypeptide of claim 96, wherein said polypeptide causes a greater stimulation in BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts than does epidermal growth factor (EGF),

transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) or basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation in each cell type.

106. A pharmaceutical composition comprising the polypeptide according to one of claims 92 to 105 and a pharmaceutically acceptable carrier.

107. A method of producing a KGF polypeptide comprising:

- (a) expressing a DNA encoding a KGF polypeptide in a host cell; and
- (b) isolating the KGF polypeptide from the cell.

108. A method of producing a KGF polypeptide or segment thereof, comprising:

- (a) expressing a DNA encoding a KGF polypeptide or segment thereof in a host cell; and
- (b) isolating the KGF polypeptide or segment thereof from the cell.